



# UNITED STATES PATENT AND TRADEMARK OFFICE

27

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,589	10/10/2003	Richard G. Osborn	51487-1	2588
23971	7590	04/19/2005	EXAMINER	
BENNETT JONES C/O MS ROSEANN CALDWELL 4500 BANKERS HALL EAST 855 - 2ND STREET, SW CALGARY, AB T2P 4K7 CANADA			JOHNSON III, HENRY M	
			ART UNIT	PAPER NUMBER
			3739	
DATE MAILED: 04/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/605,589

Applicant(s)

OSBORN ET AL.

Examiner

Henry M Johnson, III

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 031804.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

This application lacks formal drawings. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Method and Apparatus for Light Therapy.

### ***Claim Objections***

Claim 1 is objected to because of the following informalities: the claim is not numbered properly. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(f) he did not himself invent the subject matter sought to be patented.

(g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's

Art Unit: 3739

invention thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Claims 1-35 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication US 2005/0073839 to Pederson et al. The Pederson et al. application disclosure is nearly word for word identical to the applicants and many of the claims are exactly the same.

Claims 1-35 are rejected under 35 U.S.C. 102(f) as being anticipated by U.S. Patent Application Publication US 2005/0073839 to Pederson et al.

Claims 1-35 are rejected under 35 U.S.C. 102(g) as being anticipated by U.S. Patent Application Publication US 2005/0073839 to Pederson et al. The Pederson et al. application disclosure is nearly word for word identical to the applicants and many of the claims are exactly the same.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 3739

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,875,225 to Pederson et al. in view of "Phase advancing human circadian rhythms with short wavelength light", Warman et al., Neuroscience Letters 2003 May 15;342(1-2):37-40.

Pederson et al. disclose a light treatment device comprising: an outer housing including a opening; a light emitting assembly in the housing and operable to emit light through the opening in the housing, the light emitting assembly including a plurality of LEDs capable of generating 2,500 lux to 7,500 lux at 12 inches. The LEDs include at least some capable of emitting white-light. The LEDs are arranged in a pattern over an area and the light emitting assembly is selected to emit light from the LEDs along a substantially straight line directly toward the user. The beam of LEDs is inherently divergent. A diffuser screen of light diffusing sheet material is positioned over the LEDs to provide a more uniform emission of light. The diffuser sheet material can include a filter (Col. 1, lines 46-63). The method of use is to direct the light towards a user. Several supporting structures are disclosed. Pederson et al. do not teach low lux levels. Warman et al. disclose clinical results indicating that the short wavelengths of lower levels have more effect on the circadian rhythms than longer wavelengths at higher levels. Specifically, a wavelength of 460 nm to 497nm is disclosed as most effective at levels as low as 8 lux or  $28 \mu\text{W}/\text{cm}^2$  ( $.28 \text{ W}/\text{m}^2$ ). The percentage of the wavelength relative to other wavelengths is not disclosed by the applicant as critical and Warman et al. substantiate this by its silence in regard to proportions. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the wavelengths and levels as taught by Warman et al. in the device of Pederson et al. as the wavelengths are proven more effective and the lower power required for lower lux levels is obviously attractive for a portable device.

Art Unit: 3739

Mounting configurations of light emitting devices are numerous and well known in the art and considered obvious.

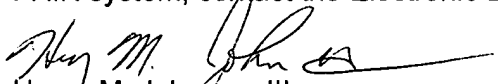
### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. "High sensitivity of the human circadian melatonin rhythm to resetting by short wavelength light", Lockley et al., Journal of Clinical Endocrinol Metab. 2003 Sep;88(9):4502-5 teach lower wavelengths (460 nm) and low lux levels of light to be more effective and energy efficient for treating circadian disorders.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry M Johnson, III whose telephone number is (571) 272-4768. The examiner can normally be reached on Monday through Friday from 6:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Henry M. Johnson, III  
Primary Examiner  
Art Unit 3739